H1N1 vaccine information in a nutshell

As the first batches of the H1N1 vaccine are distributed, is my pleasure to introduce our first guest blogger Kimberly Lafferty. A mom and well respected scientist, she brings us information on the H1N1 vaccine. Dr. Lafferty holds a doctorate in pharmacology from University of North Carolina at Chapel Hill and a masters of business administration from Pennsylvania State University. She completed a fellowship in clinical research and drug development and is a mom to a young child and an infant.

Naline Lai, MD

* * * * * *

As a mother of two young children, I am always concerned about their health and well-being. So, naturally, I am especially concerned about the novel influenza A/H1N1 strain that has led to the current global pandemic. But, as a pharmacist with over ten years experience in the pharmaceutical industry (mostly in research & development), I also know the importance of good research and making decisions based on the best available scientific evidence. Therefore, I have spent quite a bit of time researching the novel H1N1 virus and the soon-to-be available vaccine. Below is a summary of my findings:

1. While most people infected with H1N1 have had only mild to moderate symptoms, there have been deaths associated with this virus. Many of these have been in people with underlying chronic health conditions, but some deaths have occurred in otherwise healthy, young people.

2. According to the CDC (US Center for Disease Control and Prevention) on 10/1/2009, 100 pregnant women in the U.S. have required treatment for H1N1 influenza in intensive care units;

28 of these have died. Pregnant women are especially vulnerable to infections (due to a weakened immune system) and are at especially high risk of complications from the H1N1 strain.

3. The H1N1 vaccine is made by the same companies and by the same processes as the seasonal flu vaccine. It is also undergoing the same lot testing and release procedures as the seasonal flu vaccine. The only difference between the seasonal vaccine and the H1N1 vaccine is that the H1N1 vaccine contains only one strain of influenza while the seasonal vaccine contains three. While the strain in the H1N1 vaccine is different from the strains in the seasonal vaccine, the seasonal flu vaccine has been safely admininstered to millions of people over many years, including children.

4. Because the H1N1 vaccine is made the same way as the seasonal flu vaccine, clinical trials were officially not necessary for this vaccine. However, the NIH (National Institute of Health) and the manufacturers are separately conducting clinical trials, not only to verify the safety of the vaccine, but also to determine the optimal dose and dosing schedule needed to ensure that people who are vaccinated become immune to the H1N1 strain of flu.

5. The H1N1 vaccines currently approved in the U.S. do NOT contain adjuvant (or “immune boosters”). Adjuvants are used in European seasonal flu vaccines and the European H1N1 vaccine.

6. As with the seasonal influenza vaccine, the H1N1 vaccine will be available in preservative-free formulations. These will most likely be targeted to young children and pregnant women.

Since there are a lot of myths and misinformation out there regarding the H1N1 vaccine, focus your own research on

independent, credible sources such as the World Health Organization (WHO), the US Centers for Disease Control and Prevention(CDC), the Food and Drug Administration (FDA), and your state/local health departments. One important resource is www.flu.gov.

Kimberly Lafferty, Pharm D, MBA